

ABSTRACT OF THE DISCLOSURE

In a computer network having a plurality of computer nodes, a directory database (DDB) distributed throughout the network in each of the nodes, the contents of the DDB being maintained consistent or replicated throughout the network in a manner to avoid a single point of failure through the use of one of its nodes having been appointed as master node. The master node has a privileged status as compared to the other nodes. The master node updates each DDB in each node in its network or domain configuration when the configuration changes, such as when a node fails, a network link fails and/or a node is added or removed. A node can be added to or removed from the configuration through the master node or through a non master node. A node can fail under different circumstances in which it may or may not know which node is its master node. A master node can fail and be replaced or can be replaced for other reasons. A global administrator is a privileged user compared to other computer network users who has authority to replace or appoint a master node and to configure a domain, and who performs these and other functions by way of computer terminal screen dialogs offered by a graphical user interface (GUI) associated with the computer network. Replication service includes pinging by the master node of its failed or potentially failed nodes, and participating nodes in the configuration use repetitive polling of their master node to aid it in its pursuit of DDB consistency across the configuration.